

SPACE MIGRATION

Let us now consider three neo-ancient ideas which are going to change your lives. These three classic novelties are Space Migration, Intelligence Increase and Life Extension.

I flatly predict that more than half of you reading these words will, in the next decade or two, be living, working, playing or paying resort vacation visits to High Orbital Mini-Earths.

Everyone reading these lines is going to witness, hopefully, within your own nervous system, but certainly in the nervous systems of most of your fellow species, an incredible acceleration in human intelligence.

And everyone holding this book will have the option to live as long as she wants.

Everything else I'm going to be saying in the next few minutes is designed to give you more options. I've told you not to believe anything I say. I'm certainly not selling you anything, ~~I'm providing you,~~ I'm passing on to you, three ideas which will open up many new possibilities for you to reject, to accept, to consider skeptically, to watch evolve and to make a part of your life if and when it feels right for you, ~~to do this.~~

I must also tell you that nothing I'm saying now is my own idea. I don't have one creative bone in my body. Everything I'm transmitting to you now is coming from respectable, scientific journals, I'm simply a network broadcaster reading you a message.

Think of me as your friendly announcer from station KDNA telling you what is going to happen, providing you with options that you can accept or reject. Reading the evolutionary commercial, we have coined the acronym S.M.²I.L.E. It's a memory device to remind ourselves that those three notions go together. It's always that way in the evolution of species or the evolution of individuals--certain processes suddenly occur together. For example the incredible scientific explosions ^{such as} of radar, electromagnetic communication, nuclear fission, psychopharmacology, ^{and} genetic research. All these things didn't happen ^{randomly} accidentally. They came together. They ~~had to emerge~~ ^{at} together in this precise point in human history because we evolved to a position where we were ready as a species to deal with these new concepts. The same is true of space migration, intelligence increase and life extension. They emerge together.

First, let us contemplate space migration. It's ironic that I come to Tucson, Arizona to talk about space migration because Tucson, Arizona is the world capital of this movement which may be more important than the Christopher Columbus lurch of the fifteenth century. It is with heartfelt reverence that I tell you that the major work being done in sending this mutational signal around the global swamp ^g to our species is generated by the L-5 Society of Tucson. Now I told you these are not my ideas. I'm operating as an agent of the L-5 Society and as the agent of a man named Gerard O'Neil. ^{ff} Who is Gerard O'Neil? To answer that question gives me that great privilege of sharing with other

intelligent people, the name of a man whose vision is going to change our concept of human nature, and human future. Gerard O'Neil is a top drawer, highly respected physicist from Princeton.

He is a part of that elite group of women and men who ~~(there may not be more than twenty or thirty in the world)~~ ^{have led the expeditions} are probing the mysteries of the nucleus of the atom. He ~~has~~ ^{the storage rings for particle} designed acceleration rings which are ~~used in high particle research~~ ^{the cutting edge tools of research experiments.}. He's an eminently respectable ^{applied} gadget scientist. I strongly urge anyone who is interested in the future to read his book. It is called "The High Frontier" and ^{it's} is published by ^{William} Morrow. I'm sure it's in your bookstore. If it's not, I urge you to order it from the L-5 Society.

Now, when we speak about "space migration," when you hear the words "space colonization," please divest from your minds notions of Buck Rogers or 2001 or Star Trek ^{or} is galactic good guys and bad guys. We must de-mystify space.

We were told a few centuries ago that the world was flat. We have been told all along that the world is closed. My friends, the world is neither flat nor closed; the earth is both round and open. Our first seed pods in the form of Apollo astronauts and Russian cosmonauts have breached the placental membrane of the Van Allen belt. Our species, ready or not, or like it or not, is ready to move off the planet. ~~This is a matter of history~~ ^{this is becoming history} right now ^{on} the drawing boards of NASA, which is a highly conservative

organization. Indeed, the hardware ^{software and peopleware} and ~~economic~~ ^{and others at} aspects of space migration have been worked out by O'Neil ^{NASA's} by the Ames Summers studies in Mountainview, California, and by other aerospace groups. It's rather conservative, accepted science rather than speculation, that we are considering.

There are twenty-four basic neurogenetic reasons why humanity is migrating from the womb planet. We are leaving for:

1. Genetic survival
2. ^{Biological} ~~Bio-survival~~ survival
3. Ecological survival
4. Increased mobility
5. Territorial expansion
6. Political harmony
7. Economic affluence
8. Intellectual growth
9. Creative opportunity
10. Individual ego development
11. Familial development
12. Cultural development

We are migrating to attain in the future:

13. Hedonic stimulation
14. Aesthetic intelligence
15. Aesthetic communion
16. Neurological stimulation
17. Reality expansion

18. Telepathic communion
19. Genetic awareness
20. Genetic intelligence
21. Interspecies communion
22. Quantum awareness
23. Quantum intelligence
24. Quantum communication

Let us briefly survey those ^{first twelve} 24 genetic imperatives pushing us off the nursery planet.

1. Most basic to our migration are the genetic reasons. We've ~~re~~ ^{been} squeezed off the planet earth like birds off the nest. Let us think of the earth as a womb planet. We were seeded here. We have grown in embryonic fashion here and it is time now for us to move out. There may be some among us (the ecological hardcore purists) who will say, "Well, if we just huddle together and breathe in unison and limit our growth we can stay in the womb a few more years", but that's not the way evolution works. So we're being expelled, ready or not, like it or not. We don't "deserve it," but it's predetermined that many of us are going to be pushed off the planet.

^{Next, there's}
2. ~~I could describe to you~~ the biological imperative: we simply can't continue to exist on this planet, shrinking as it is with a larger population. You know, it's amusing. Once you get this exo-psychological point of view, you just read the paper and see that most headlines reflect the fact that a planet is a very

inefficient place to live. I've just come from the East coast of the U.S. and I tell you they're running out of fuel, they're running out of heat, ^{and} the ~~entire~~ industry of Ohio is collapsing now, because of the climate. I was in West Virginia about two nights ago; they're rationing water. Let me mention the drought in California; the citrus failure in Florida, the snowdrifts of Buffalo. Here we are, the most highly technological country on the planet and we simply can't heat our homes. The President is telling us to sacrifice and cut down heat, cut down speed and to perform unnatural acts of limitation that seem to be in opposition to our genetic imperatives to move faster, farther, higher, with greater precision.

3. I ~~could describe the~~ ^{And the} ecological impossibility of continuing to grow on this planet. We are polluting it. Now there are some among us who will say, "limit growth." Sure, it's easy for a middle class American to say "limit growth," but try that in Bangladesh and you won't last very long. Even Ralph Nader couldn't bail you out. The ecological facts are clear; we're facing an agonizing paradox. We've got to ^{make available to} ~~give~~ the underdeveloped countries ^{access to a} and the poor in our own society ~~their fair~~ share of the goods and material possessions. We've got to give them their fair shake, but there is simply ^{no} ~~not~~ the energy nor ^{harder} ~~are there~~ the material resources, ~~on this planet~~ even if we raped and looted and strip-mined ^{the planet}. Whereas just a few thousand miles up there is limitless energy, limitless natural resources.

4. I could talk at great length about the fact that we are running out of the mobility option. I mentioned ~~in an~~ earlier lecture that we are animals, we are primates and we need room. As soon as we crowd together we fraction the family, we fraction the molecular social group. We're basically primates, we need to live in small groups, our children have to grow up with other children. The nuclear family crowded in an apartment is an insectoid form of life. For ~~a~~ thousands ^{of} years we have grown up in small groups in extensive, open village space ^{with our} ~~where the~~ uncles, aunts and grandparents living in close proximity, learning from each other. Extended families, ^{and} village life requires space, and ~~exactly~~ this room to move is ^{being} ~~eliminated~~, step-by-step, by urbanization in most countries on this planet. Mobility is being limited by increasing centralization: There are only about two dozen democracies left in the ^{world} ~~country~~ and every year we see another democracy topple. Democracy means freedom to move. The general political trend on this planet is clearly centralized, insectoid authority, in which the family is being destroyed, in which individualism is being destroyed, ~~and in which~~ ^T the small familial and cultural village type groups which have given us our strength and given us our molecular-social insight are being eliminated. The Central State is becoming husband, wife, God and the source of all our love. This cramped, static insectoid existence is very different from my ^{own} aspirations and goals, ^{and many} ~~for myself and for those~~ who share my view of the situation. Watch carefully these restrictions on

^{for lower}
speed, 55 mile restrictions, Concorde limitations, passports and
^{limit}
visas - which shrink, our ability to move at the speed which
comes naturally.

5. I could talk to you endlessly about the Territorial Imperative
of Space Migration. *I already have.*

6. The basic political point is clear. We simply can't go on
fighting over a shrinking globe.

7. Did you notice in the 1976 election neither candidate came
up with any sort of convincing economic solution? The energy and
employment situation is really quite grim. I'll tell you flatly,
my fellow citizens, there are only two ways we can have full employ-
ment or a growth economy in this country: ~~A~~ another war, or the
mobilization of our energies towards a national priority project
which will unify our visions and our hopes. I want to remind you
economics majors in the audience ^{and} or those of you who are committed
to political partisan solutions, either left wing or right wing,
that there is no hope in politics. (Applause)...

I was amused by a recent letter to the Editor of the L.A. Times.
It said, "The gas shortage is due to the Democrats." The politics
of good-guys and bad-guys is over.

The blunt facts are this, as far as economics are concerned (for
any of you who still have any political illusions) the Democrats
in general have been committed to full employment but the last
five Democratic Presidents have put us in ⁱⁿ a war. I think we can

see why. And the last five Republican Presidents have taken us out of the war, ^Pprobably because Republicans prefer a little unemployment, ^{because} it helps with the servant problem. (Laughter). ^{TP} At this point let me ^{also} urge you to divest ~~from your thinking~~, ^{yourself} planetary chauvinism. You know I meet people who say, "Hey, Tim, so you're going off to another planet, huh?" So I say, "No, I don't want to be trapped on another planet".

At this point, intellectually we're getting kind of bored down here. I want to tell you that planets are not ^{the greatest} good places to be. The facts of the matter are ^{that} we are crawling around on the bottom of a 4,000 mile gravity swamp. We think we're pretty fast moving folk, but actually we're snails, ^{we're} slugs pulling ourselves around here, held down by gravity.

Now I've always been an enemy of gravity, as you well know. (Laughter). Gravity is undeniably a drag. Gravity literally sucks us down. It has always depressed me. Isn't it true that all of our philosophies, religious myths both civilized (so-called) and primitive, ^(so-called) say nothing much happens down here. That our kingdom is not of this world. That the real action takes place up there. The fact that many of our religions sold celestial stock prematurely should not allow us to forget that the time has come for us to act upon the ancient imperatives ^{that} and commands us to move upward and outward, to get into conversations with higher intelligence, ^(namely ourselves), up there.

~~I talked about~~, I ^{and} probably said it before, but I will say it again. ^{are} that the hardware, economic aspects of space migration ^{are} is settled.

There is no argument there. It is cheaper and more efficient to live up there. When I talk about space migration, ~~I want you to think of these pictures we put on the screen during intermission.~~ Think of cylinders ten, twenty, thirty miles long, several miles in diameter, in which the climate will be of your own choosing.

It's time that we demystify space. The first wave of any exploration, as I've said, is macho, freebooters, marines, airforce academy graduates and so forth; but the real migration takes place when wives and husbands and families and lovers and children go out. I want to say to the women in this audience, don't be irritated, or frightened or bored by the fact that the space situation has been macho male. From this point on, the great energy towards space is inevitably going to be from the women, because it is always the women who have the intelligence to carry the species into the new frontiers. From now on the challenges in space involve soft-ware, problems of architecture, problems of art, problems of domestication, problems of landscape selection and cultural lifestyle options.

Now I've been told by many of the experts in this field (and I believe them because I have studied the situation) that it is a lot cheaper to live up there than it is down here. We can build a condominium in space for 5,000 people in which we'll have the climate and environment of our own choice in which each person will have 4 ^{land} acres and each family a single dwelling house of their own luxurious selection. It will be cheaper to build up there than for us to buy 5,000 3-bedroom, 2-bathroom houses in

the suburbs of Tucson, even if the gangsters stay out of it.

Now ~~Let~~ ^{up there.} me give you an example or two why it is simpler and cheaper to live in a ~~zero gravity atmosphere than down here.~~ I could take the oil chain ~~now~~ ^{on} that's an economic and ecological farce. Pumping oil out of the desert and shipping it in tankers across the polluted oceans. ~~In the first place,~~ Oil is a very valuable product. Every time you burn oil in your gas tank you're burning \$10 bills or kilos of marijuana. Oil is a very valuable organic commodity ~~for food, for plastics~~ ^{and as industrial raw material} and simply should not be burned. ^{Up there energy's free, and we can pump it back down here.}

I could discuss the inefficient food cycle on a planetary surface. It is just uncomfortable, unwieldy to live on a planet.

However, let's

~~Let us~~ consider the metal chain. You go to Minnesota and you dig down ~~half a mile in~~ ^{through the} rock and you bring up some low grade ore, (lower grade than the Moon) and you ship it in trucks to the Great Lakes to be put on barges and ~~sent~~ ^{pushed} down to Chicago where it is ~~put on flat cars~~ ^{loaded in railroad} and ~~sent~~ ^{pulled} to Pittsburgh, where it's rolled into tremendous ingots and ~~it's put on flat cars~~ ^{they're lifted onto} and ~~sent~~ ^{hailed} to Kaiser Fontana Steel in Los Angeles where ~~it is~~ ^{they're} converted to small ingots, ^{then} ~~A~~ sent down to San Diego, where they make it into flat irons that are then shipped by truck back to the housewife in Duluth, Minnesota. Now, you're just pushing heavy, heavy stuff 5,000 miles against gravity. The only people that can rejoice from this sort of ridiculous procedure is the Teamsters Union.

However, we're against no one and we invite everyone ^{including the Teamsters} to go with us. The nice thing about space migration is that there are no more good guys or bad guys, ^{and} ~~Certainly~~, as a species we have grown beyond the point that we can blame other people ^{or} ~~and we can~~ think that if we get our people in power it is going to work out. Since we are beyond good guys, bad guys, ^{there's} ~~there's~~ definitely going to be a place in space for the Teamsters Union. Tony, we need chauffeurs to run those orbiters. I expect the shuttle astronauts will be Teamsters.

8 and 9. The stimulation of more effective intellectual function and creativity will be discussed in a later ~~section of this chapter~~ devoted to Intelligence Increase.

10. Individual and 11. Cultural Growth - Now, in everything that Professor O'Neil of Princeton has written about space migration, and in the conversations I have had with the people who are pushing it, ~~in the government and in the aerospace institutes in the country,~~ one very important concept emerges. The reason we're building H.O.M.E.S. in the sky is not an obsession with tinker toy technology. We're migrating into space in order to multiply human options. Plurality of choice is the key to the game. That's how people evolve. We're running out of options down here and conformity spells genetic stagnation.

It's necessary for us to have territory to live out individual and cultural experiments. We're elbowing each other in a too compressed fashion down here to allow for divergence. We're

migrating to give every group of human beings who have the energy and the courage ^{the opportunity} to move up there, and to build a small world of their own design, where they can live out their own fantasies and aspirations, however kookie they may be. Because that's the name of the evolution game. That's how we moved across the praries and that's the natural development of the cultural and individual explorations of the sixties. I want to tell my friends from the sixties that everything I have said tonight is a direct, exquisite exfoliation of what we ^{stood for} ~~believed~~ in the sixties. We found in the sixties that if you go inside your brain you find all sorts of ~~ndaral~~ realms, internal places to visit, all sorts of possibilities. Endless geographies within your own head, but when you opened your eyes and came back down you found the Viet Nam war ~~was in operation~~ and ~~that there was~~ fighting in the ghettos and on the campuses, and harrassment of cultural alternates. If you have discovered the endless possibility for creation of internal realities, then you are ready, and then I think only you are ready for moving upward and outward. Ready to create external realities?

I tell you that within thirty years there will be a H.O.M.E. for bi-sexual vegetarians, And there'll be worlds for National Rifle Association people who like to shoot each other up. And there'll be worlds for Hell's Angels who can ride into town on Saturday night and kick off their machines and go into a barroom and have a good fight. That's great! Why shouldn't they? That's the oldest Western tradition. If they want to do it, let them do it in their own world where they bother no one else.

The point is it's better to move on than to fight. I think that if you look back at ^{the} history of intelligence as it moves across this planet, you'll see that the intelligent people always move on rather than fight. Because the problem with fighting over turf and territory is that it ^eis an endless struggle. As soon as you win you're on top and everyone is trying to knock you off. The only way to expand and explore and to grow and to evolve culturally and psychologically--^git is not to fight over the limited old but to move on and upward to the limitless new.

At this point, let's try our first mutational experiment which is aimed at moving you from a terrestrial to a post-terrestrial point of view. Are the neuro-electric technicians ready? O.K. Prepare to mutate.

(AIRPLANE SOUND EFFECTS) THIS IS YOUR TOUR DIRECTOR, ALL BIO-SYSTEMS ARE READY TO BE ACTIVATED. YOU'RE ABOUT TO LEAVE EARTHLING STATUS AND MUTATE TO POST-TERRESTIAL EXISTENCE. FROM THIS MOMENT ON, YOU WILL BE MOVING UP TO THE PLEASURE WORLD OF YOUR OWN DESIGN. PREPARE TO MUTATE. THE TIME SHIP IN WHICH YOU LEAVE THE EARTH IS YOUR OWN BODY; YOUR TIME SHIP IS NOW LOADING. MUTANTS ONLY BEYOND THIS POINT.

I'm going to terminate the discussion about space migration; not for lack of facts and figures. I could talk about it for 24 hours because there's no aspect of human life that won't be expanded,

multiplied in options and esthetic possibilities once we understand that we can create worlds of our own design. You remember we went through this before. When we were all under the primordial sea, they said "well how dare you leave when we haven't solved the problems down here of sharks versus dolphins?" And they also said, "You can't live on land because the land is notoriously alien to marine life." ^{So} the technical solution of DNA is obvious. DNA designed us time ships and space ships to leave the water. We literally brought the oceans with us. I'm referring, of course, to our own bodies, which ^{carry} ~~contain exactly~~ the temperature and salinity and bio-chemical ~~births~~ of the oceans we left.

Now the same situation occurs when we are prepared to leave the planet. There are some among us who conservatively say, "Well, you know, it's going to be freaky and frightening. Space is not the place. It's hostile to human life. So the familiar solution repeats. We're going to build bodies, H.O.M.E. bodies in which we'll carry the ocean and the land.

There has been a great flap at NASA about how to popularize the notion of space migration. NASA administrators know that their bread and butter is going to come, not from astronaut acrobatics or un-manned flights to Mars (however magnificent and however glorious those engineering achievements were). It is going to be space migration ^{and industrializations,} So after many months of deliberation and pulling of the gray bureaucratic beards, NASA finally decided:

"Let's not call it space colonization because colonization has unfortunate political overtones. ⁹Let's call it space settlement because that gets us back to the old pioneer spirit."

Well, I'm in favor of that. I think we should all be pioneers and never forget that we came from pioneers. But I prefer to describe our new H.O.M.E.S. with the words, space bodies, or space skins, because that is exactly what it is going to be. We're going to build these skins and we will bring with us in these skins the earth and the ocean and we will arrange them in the most natural ^{and existing and} ecologically efficient way. I should tell you one technical fact (although it isn't my job to do it). We're not going to bring top soil and minerals from the earth. Obviously, it would be inefficient and expensive to do this. The H.O.M.E.S. that we are going to build up there are going to come from the Moon. O'Neil and his colleagues have designed ^{systems} ~~operations~~ which can mine the moon very inexpensively, and mass drivers ^{which} will shoot packages of moon soil out to the ~~L-5 liberation points~~ where they will be used to construct H.O.M.E.S. of ~~which you have seen~~ photo-slides -- ~~ski resorts and beaches and resort villages and~~ mountains. ~~e~~

NOTE - Hey - we never got
12

LIFE EXTENSION

I have suggested that the three ²fatigue processes go together. Space Migration cannot occur unless you have intelligence increase, otherwise ^{we} ~~it~~ simply would be bringing our boredom up there. Nor

can you have life extension without space migration. I'm sure you can understand why.

For centuries, for millennia, it has been ~~the number one goal of~~ ^{quest of} human aspiration and ^{a major} philosophy, and art and poetry to speculate about immortality. Ponce de Leon came to Florida looking for the fountain of youth, and the great Alchemists in the past (who created the science of chemistry) were looking for the philosophers stone and the key to eternal life.

We're now told by biologists and geneticists that if we put into longevity research the amount of money we put into skate boards, we could ~~probably~~ ^{human} double the life span in five or ten years.

^{The outlines of} ~~how to do it~~ ^{are} is well known. But there is a good reason why we haven't extended the life span, ~~up until this time because~~ life extension without space migration would be a political nightmare. Who'd get the longevity pill? Would it be the military, the Rockefellers or the politicians or the commissars. A very nasty competitive situation would develop.

Furthermore, if we had longevity before space migration we'd have the horrible situation of more and more old people. The planet is getting too small anyway and if nobody died we'd have a depressing outbreak of nostalgia. If you think it's bad now, [?] Are you ready for the horrible prospect of Frank Sinatra and John Denver, age 500, singing golden oldies at Caesar's Palace. And President Nixon in the front row cheering them. (Because in our

boredom we would have re-elected the wretch).

There was a Gallup poll about two years ago which asked the average American "would you like to live 100 years more?" And the average American said "Uh, uh, my marriage won't stand it." Or, "No, I can't take 100 more years of Howard Cossell!" You can't have life extension before space migration. However, once we start migrating from the planet, longevity will not cause population pressure. O'Neil's projections suggest that by the *middle of the next century* ~~year 2020~~, if his time schedule is adhered to, there ^{can} ~~will~~ be more people leaving the planet than are being born down here, which means that the population curve will start dropping. Within ~~50~~ ^{a few more} years our planet ^{can} ~~will~~ return to ^{an optimal} ~~the optional~~ demographic state; ^{perhaps} a billion and a half people, ^{or} the way it was 200 years ago, when the buffalo were back in South Dakota. The stay-at-home terrestrials will be taking charge of this natural park, and those of us who go up will return for nostalgic visits to the quaint old world, ^{as} we go back to Europe now.

TAPE 2 SIDE B

This is not the place to review the technicalities of life extension. Let me say only that the current research on histone proteins (which quilt the DNA code and keep the DNA code from unfolding except in a determined order) and research on anti-hon-histone proteins which specifically trigger off mutations in the DNA code, ~~has~~ ^{she} suggested that death is a preprogrammed obsolescence, ~~on the part of~~ ^{the} DNA code ~~to~~ get the old bodies off the scene so the new bodies can come along and carry the progress evolution to the point that we have now reached of technological maturity. Death, in a sentence, is a self-destruct button inside your own body, which we are now intelligent enough and mature enough, and virtuous enough to defuse.

Now, with your permission, we'll try a second mutational experiment. Are you ready in the control room, commodore? OK. Dim the lights.

"THIS IS YOUR GENETIC DIRECTOR. WE HAVE JUST RECEIVED CLEARANCE FROM DNA HEADQUARTERS. FOR YOUR OWN SAFETY AND PLEASURE, YOU ARE INSTRUCTED TO AVOID DEATH. YOU NEED NOT DIE. REPEAT: YOU NEED NOT DIE.

"FOR THE TIME OF YOUR LIFE AND TO PERFORM YOUR EVOLUTIONARY FUNCTION, YOU ARE URGED TO SCRATCH DEATH FROM YOUR APPOINTMENT BOOK. REMEMBER: THE ONLY FATAL DISEASE IS DEATH. SO, UNBUCKLE YOUR SEAT BELTS AND PREPARE TO LIVE FOREVER."

(Applause).

INTELLIGENCE INCREASE

Thank you. I'm going to talk for just a few minutes about intelligence increase, ^{This} which does not mean doubling your vocabulary level or your reading level. The Readers' Digest will handle that for you. I'm talking about activating new circuits of your nervous system which are not now used by most human beings.

This notion of activating new circuits of your nervous system should not come as a surprise, because ^{As} you have evolved, and as I have evolved, as individuals, we have had the experience of new circuits of our nervous system being activated, triggered off at the right time. When we were ten years old, we were skinny little people, and ^{The} nervous system which was to guide, direct and propel the curvy, voluptuous teenage body, had not made its appearance, so that ^{As} we study our own evolution and our own development, we have seen that step-by-step, new circuits of a nervous system have been activated.

The geneticists tell us that it is very likely that inside the DNA code there are trigger mechanisms and activating mechanisms to open up new circuits of our nervous system, and I suggest that once we migrate into space, we will become smarter. Because it's always true--you have to become smarter when you migrate to a new situation. New, open, free environments always activate new levels of intelligence.

I am here to tell you, my friends, that you can't get too

smart in terrestrial society, or you get into trouble.

Now, ^{when} I say "intelligence increase" I'm talking not about I.Q. (which is an invention of the academic middle class). I'm talking about the research of Robert Orenstein of San Francisco, who introduced us to the bi-cameral brain-the differences between the left brain and the right brain. The left brain, as we know, mediates linearity, ABC, 1-2-3 thinking, orderly thinking, the step-by-step thinking, ^e so prized by universities of this sort, ~~whereas~~ ^T The right brain seems to mediate the more interesting phenomena of seriality, of rhythm, of sequence, of pattern, of movement, of music, of art, ^{and} ^{providing} sensuality, and so forth.

Now, when Orenstein and his colleagues tell us we have a right brain with all these new functions, he's ^{providing} multiplying new dimensions of intelligence, because there are many, many, new functions that are mediated by the right brain.

I refer you to the researchers ^g in Bio-Feedback. Children in California are being taught how to get intelligent and disciplined control over body functions and neurological functions that have up until recently been automatic or unconscious, ~~like~~ like pupil dilation, control of respiration, ^{and} control of heart-beat. The facts are that the human brain monitors cellular transactions and organ functions. We are not aware of it because as a species we aren't mature enough to get control of

our own brains and bodies, ^Bbut now that we've reached the point where we have turned on, tuned in and moved out, we have to manage this neurosomatic equipment in order to survive and to evolve in a post-terrestrial situation.

People sometimes ask me, "Do you have any evidence that leaving the planet triggers off new circuits in the nervous system?"

Well, we know ^{first} that new circuits are activated and new realities created down here. Every woman in this audience who has had a child knows that when your first child was born, strange things happened in your nervous system and you were given new kinds of intelligences that you didn't have as a ~~frivolous~~ non-pregnant young woman. Most men who have had the experience of fatherhood will tell you that the first time they ~~looked down and~~ ^gsaw their beloved wife and their new baby, there seemed to be a signal that triggers off in the ^{ir}nervous system ~~and the DNA code~~ a message, "Hey, it's time to play the husband game." Dramatic changes take place in most husbands when the stimulus of parenthood has occurred. So this notion of activating new levels of the nervous system should not come as a surprise.

But do I have any evidence that post-terrestrial experience will increase intelligence? Yes, my friends, I do. Consider ~~the~~ ^{the two dozen} ~~25~~ ^{or so} cosmonauts and astronauts; well-trained cadets, carefully selected for ^{patriotic} ~~red, white and blue~~, down-the-line, straight arrow thinking. ^{More than half of those} ~~Of the 25 of them~~ who experienced EVA or lunar walks

~~more than half of them~~ came back raving like ~~acid heads!~~ ^{sketch rippers!}
~~Take Edgar~~ ^{poetically} refer to Mitchell, who has described his experience of looking
up at that small agate, that tiny little stone ball that is our
planet and seeing it in the dark velvet expanse of space and
realizing the delicate ecological web, the fragile human con-
sciousness that keeps us all together. Realizing how finite, --
how small it is, Mitchell came back and quit his job and started, --
of all things -- ^{for} an institute of consciousness research in
California! Of course, in all ^{such migrations} ~~psychedelic movements~~ you have a
few bad trips. Alden had a bumner, but Buzz worked it through
and has now joined with Mitchell ~~in Northern California~~ studying
consciousness. That's coming a long way for a West Point Colonel.

I have met several of the astronauts, and it is an eerie exper-
ience. You look in their eyes, and you have that flash. Here's
someone who has seen a great deal, who has seen beyond the game
of tribal conflict down here, and seen far beyond the military
situation! I am extremely proud of our astronauts because, far
from their image of being goody, goody straight-arrows, they are
intelligent and deep-thinking people. They are definitely closet
humanists and closet Space Migrants.

Before we terminate ^{this} ~~the~~ discussion, I would like to do two
things: First, I would like to run a survey to see how successful
our mutational experiment was. I like to think of myself as being
an alien intelligence sent down here; I have to report back to
gallactic ^{C.I.A.} headquarters tonight about the success of my

mission, so I'd like to have a show of hands. How many of you would like to orbit up to space H.O.M.E.'S. and live forever? Could I have a show of hands? Hey, well, that's fantastic! We got at least fifty percent!

Now, I'm not going to ask for a show of hands of those of you who want to stay down here and die! But I'll give you another chance. How many would be willing to go up in space if you could come down any time you wanted, and could live forever if you could die any time you wanted? Now, how many of you go for that? Eighty percent! That's fantastic!

Now, I'm not going to ask for a show of hands of those of you who would like to sit on your upholstery and watch us do it on a 90-minute television spectacular. Nor can I apologize to those few of you who may be irritated because I have provided you with options that you weren't ready for. That's the name of the game - options. ^{of} That's all I've been talking about tonight - options. Some of you may want to go right away; some can watch us as we try. If we fail you'll learn something; but there is nothing to lose and plenty to gain from the plans we've been talking about tonight.

I'm going to conclude with a parable. (It's taken for granted that alien intelligences end their sermons with parables.) My parable plays off a scientific fact that is extremely important. You are all aware of the fact that inside every cell of every caterpillar is the blueprint for ^{and the intelligence to construct the body and} ~~the design of~~ the nervous

system body of a butterfly, although the simple-minded caterpillar may not know this. So, my parable discusses the five caterpillars who see their first butterfly. The first caterpillar, we'll call him the conservative one, looks up and sees the butterfly and says, "Uh-uh -- they'll never get me up in one of those!"

The second caterpillar, we'll call her the bureaucratic one, says, "There's nothing in the rule book authorizing flight. Caterpillars aren't supposed to get high. Get a net and bring that down!"

The third caterpillar is the liberal, progressive, socially-conscious, radical caterpillar -- one of the types that gets a big government salary for worrying about the poor, you know. This one says, "Why, that's an outrage -- flying around like that, when there are caterpillars in Bangladesh that don't have color TV!"

Okay, I'm an alien intelligence. Who haven't I alienated? Oh yeah, ~~ST~~ there's the Buddhist Hindu caterpillar, who folds herself into a furry lotus position and says, "Ohm" (or whatever Buddhist caterpillars say) and murmurs - "Why bother to build those wings and muscles, when I can astral travel in my head?"

And the conversation was concluded -- as all such conversations are concluded -- by the theological caterpillar who said, "If God had intended caterpillars to fly, she would have given us wings."